

May 21, 2007

Mr. Matt Thompson Water Resource Control Engineer California Regional Water Quality Control Board 895 Aerovista Place, Suite 101 San Luis Obispo, California 93401

Re: Natural Selection Foods

Dear Mr. Thompson:

895 Aerovista Place, Str. 105 San Luis Obispo, CA \$3405-75

STATE OF CALIFORNIA CENTRAL COAST WATER BOAR! Received

Enclosed please find our waiver of a Public Hearing. As discussed, Natural Selection Foods values its position in the local community, and we are working hard to protect this trust. Your consideration and efforts in this matter are appreciated.

It is my understanding that you have received both our Notice of Intent (NOI) to enroll under the general discharge requirement with the State Water Resources Control Board (SWRCB), as well as the Form 200, outlining our proposed discharge solution.

This outlines our plan to meet all SWRCB requirements. Copies of this plan have also been submitted to the San Benito County Planning Department, and the San Benito County Water District for review and approval.

It is our intention to focus on monitoring and compliance requirements going forward. We have hired Bracewell Engineering to support us in this effort. Additionally, our company is working with Bracewell to apply systems, and train our operations staff to meet the requirements of the SWRCB

Natural Selection Foods is committed to building and maintaining an efficient wash water discharge system that meets the needs of the community. We have budgeted more than \$1 million for this project and secured additional land acreage and easements to support these plans for the foreseeable future. It is our intention to have this system complete by August, 2007.

As we discussed, it is our desire to apply penalty dollars to a local environmental project. The City of San Juan Batista has a reclamation plan that proposes the use of water from the city treatment facility for irrigation of landscaping in and around the city. This plan appears to fit the policy guidelines allowing the use of such penalty funds. I have included a letter from San Juan Bautista City Manager Jan McClintock requesting use of these funds.

During our discussions with the city, it has become clear this project will be a significant asset to the community as a whole for many years into the future. Also

enclosed is a detailed project description and budget that describes the process, benefits, and budget necessary to bring such a reclamation project to this community.

Natural Selection Foods is committed to making a positive difference in our community and doing what's best for the environment. We hope that by working with the SWRCB and the City of San Juan Bautista, we can resolve our water discharge issues in a way that benefits both the community, and the watershed we all share, for many years to come.

Please feel free to contact me with any further questions. We look forward to working together on this project. I can be reached at (831) 623-7880 or by cell phone at (831) 970-3016.

Sincerely,

Joseph Torquato

Senior Facilities Manager

cc: SBC Planning Dept.

SBC Water District

City of San Juan Bautista



City of San Juan Bautista

The "City of History"

May 14, 2007

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CENTRAL COACT WATER BOARD

Reviewd

MAY 2 3 2007

895 Aerovista Place, Stc. 101
San Luis Obispo, CA 93401-7006

P.O. Box 1420 311 Second Street San Juan Bautista California 95045 (831) 623-4661 Fax (831)623-4093

City Council Mayor Priscilla Hill

Vice Mayor George Dias III

Councilmember Rick Edge

Councilmember Edward Laverone

Councilmember Robert Paradice

City Manager Jan McClintock

City Clerk A. Shawna Serna

City Treasurer Paul Petersen

Fire Chief Scott Freels Joe Torquato
Facility Manager
Earthbound Farm
San Juan Bautista, CA 95045

Re: Water Reclamation Plant for San Juan Bautista

The City of San Juan Bautista would like to express our interest in working with Natural Selection/Earthbound towards the completion of our water reclamation facilities. The City has been planning on completing this plant, but did not have the funds available to make it happen. In preparation for this eventuality, the city has required that recent subdivisions plumb for purple valve water for landscaping purposes. Additionally, we have cultivated potential customers with the San Juan Bautista Cemetery District and CalTrans.

The City views this project as critical for the City's water future. The use of non-potable water for landscaping is conservatively estimated, at current usage rates, to save the City over 1 million gallons per year in potable water. This saving represents direct savings to the rate payers and direct improvements to the Pajaro River Basin water quality.

Please keep the City informed in how we can assist you with your presentations to the Regional Water Quality Control Board.

Sincerely,

Mayor Priscilla Hill

cc. Lloyd Bracewell

San Juan Bautista Wastewater Treatment Plant Effluent Reclamation Project

The following is an outline of a basic reclamation project for implementation at the existing wastewater treatment plant as a potential environmental enhancement project that Earthbound Farm implement using a portion of the Administrative Civil Liability penalty expected to be imposed by RWQCB. Considering both treatment upgrades required at the plant, areas where reclaimed effluent is proposed to be used and administrative issues, the following provides a brief project description:

1. Existing Treatment Plant

- a. The existing treatment plant utilizes a sequencing batch reactor activated sludge process to produce an effluent quality of about 10 mg/L total solids, a turbidity of 5 NTU or less and total nitrogen less than 6 mg/L as N.
- b. The SBR effluent passes through a flow equalization basin with a detention time of about 24 hours and a fixed film nitrification reactor for further polishing with an average effluent turbidity less than 3 NTU.
- c. The nitrification reactor effluent discharges to 2 pressure mono media filters, 7 feet in diameter. The plant design capacity is 270,000 gpd or 187 gpm but currently, effluent flow rates average less than 170,000 gpd or 118 gpm. Thus the hydraulic loading on one filter at the design flow rate is 4.9 gpm/ft sq. while currently it is about 3 gpm/sq.ft. With the large flow equalization basin, the effluent flow rate is regulated to provide an almost constant flow rate at all times.
- d. Coagulant addition can be provided into the pipeline about 200 feet ahead of the filters to provide for mixing, however coagulant addition is not normally practiced.
- e. The turbidity of the filtered effluent is measured using a continuous turbidity analyzer and is usually about 1 NTU.
- f. The filtered effluent is disinfected by a Trojan ultraviolet lamp system with a design intensity of 190 micro watts per cm² using 3 banks of lamps with a redundant 4th bank. Effluent coliform counts using the multiple tube method are almost always less than 2.2 MPN/100 mL measured on a twice weekly basis.
- g. The UV disinfected effluent passes through a 10,800 gallon old chlorine contact buried pipe system. Water from this chlorine contact pipe is pumped as backwash water for the filters.

2. Treatment Plant T22 Upgrades

- a. Title 22 Disinfection
 - i. It is assumed that the reclaimed effluent will need to be chlorinated but it is unknown if a 450 min-mg/L contact time is required if the chlorine is added to UV disinfected effluent
 - ii. If UV effluent can be chlorinated without meeting the contact time requirement, then as UV disinfected effluent from the chlorine contact pipe was pumped to a pressure tank using variable speed pumps, chlorine would be metered into the discharge pipe. The discharge from the pressure supply tank would be distributed to the irrigation areas upon demand. A chlorine analyzer

- and continuous chart recorder would record the residual of the reclaimed water.
- iii. A continuous chart recorder would be added to the filter effluent turbidity meter to record the filtered effluent turbidity.
- iv. If the chlorine contact time still must be met, then we would have to
 - (1) Split the effluent using existing piping so that effluent needed for backwash and reclamation would be diverted into the chlorine contact system to keep it full and add chlorine to that side stream. The remainder of the UV effluent would be discharged directly to the outfall without any chlorine addition.
 - (2) The filter backwash pump would pump chlorinated effluent for filter backwashing and a dechlorinating agent would be added ahead of the filters to ensure there was no chlorine in the filters so that when the filters started filtering effluent there could be no chlorine in the effluent discharged to the plant outfall. A continuous chlorine analyzer and chart recorder would need to be added to comply with RWQCB monitoring requirements.
 - (3) It is also assumed daily coliform testing will be required.

3. Reclaimed Water Uses

- a. Creekbridge Estates
 - i. Purple pipe has already been installed in this small development of about 20 homes for irrigation of a small park area and a grass strip between the sidewalk and the street.
 - ii. A pipeline from the treatment plant would need to be extended approximately 1000 feet to provide reclaimed water to irrigate this small area. The water demand is unknown at this time but expected to be around 1000 gpd.
 - iii. A cross-connection survey will need to be performed to ensure all requirements would be met.
- b. San Juan Bautista Cemetery
 - i. The cemetery is adjacent to the southern border of the treatment plant and would require approximately 1500 feet of pipe to provide reclaimed water for irrigation of the cemetery.
 - ii. A cross-connection survey will need to be performed to ensure all requirements would be met.
 - iii. The reclaimed water pipeline would be installed roughly parallel to the raw wastewater forcemain that runs up the hill at the treatment plant but a minimum horizontal separation distance of 10 feet will have to be maintained. However, would there be a requirement that the reclaimed water line be installed at an elevation above the raw wastewater forcemain? If that is the case another alignment will be needed that could add 500 feet to the reclaimed water pipeline.

4. Timing

a. The upgrades required at the treatment plant appear to be minimal depending on additional or more stringent requirements by DHS or RWQCB with the

installation of the pumping and pressure storage system being the most significant. Installing chemical feed pumps, chlorine analyzers, and chart recorders is a minor task. Completing design and installation is expected to take 2 months from the time a notice to proceed with the project is given.

- b. Completion of the cross-connection surveys would be required prior to design of the reclaimed water distribution system and would not take more than a few days.
- c. Installation of the reclaimed water pipelines totals about 2500 feet and unless there are right-of-way or competitive bid issues should also be accomplished in about 2 months from the time a notice to proceed with the project is given.

5. Funding

- a. If approved by RWQCB, the source of funding for this project would come from using \$50,000 to \$80,000 of the ACL penalty to be imposed on Earthbound Farm by RWQCB.
- b. The funds would be placed in a separate City of San Juan Bautista trust account for disbursement of payments for completion of the reclamation project.

6. Project Management

a. The reclamation project will be managed by Bracewell Engineering, Inc. covering design, construction, and operation.

Listed here is a spreadsheet for use in compiling a cost estimate for the reclaimed water project for the San Juan Bautista WWTP.

Daniel W. Hugens

HDK Associates

5/9/2007

File: SJB Reclamation Engineers Estimate 5-9-07.xls

Assumptions:

Use Irrigation Rate of 40 GPM for the sizing of pipes and pumps

Description	Quantity Units	Unit Cost	Extension	
1.0 Pump <u>Pad</u>	•			
Pump Pad Concrete	3.57 cu yd	530	\$1,894	
Pump	1 ea	1,500	\$1,500	
Hydro-Pneumatic Tank	1 ea	3,500	\$3,500	
Pressure Switch	1 ea	100	\$100	
Pump Piping & Valves	1 lot	2,000	\$2,000	
Electrical Combination Starter	1 ea	1,000	\$1,000	
Conduit & Wire	1 lot	700	\$700	
Supports and Mounting	1 lot	500	\$500	
Sales Tax	7.50%		\$697.50	•
Contractors Mark-Up on Equipment and Materials	15.00%	•	\$1,395	
Installation	20.00%		\$1,860	
Subtotal Pump Pad		•		\$15,146
2.0 Waterline to Housing Development				
Waterline Installed	1000.00 ft	15	\$15,000	
Subtotal Waterline to Housing Development		-		\$15,000
			•	
3.0 Waterline to Cemetery				•
Waterline Installed	1300,00 ft	15	\$19,500	
Subtotal Waterline to Cemetery		· •		\$19,500
4.0 <u>Turbidity Meters</u>	•			
Turbidity Meter Dual Sensor	1 ea	3,300	\$3,300	
Chart Recorder; 2 pen	1 ea	900	\$900	•
Conduit & Wire	1 lot	700	\$700	
Supports and Mounting	1 lot	250	\$250	
Sales Tax	7.50%		\$386.25	
Contractors Mark-Up on Equipment and Materials	15.00%	•	\$773	
Installation	20.00%		\$1,030	
Subtotal Turbidity Meters Installed		•		\$7,339
5.0 Chlorination / Dechlorination (Optional - might not be	needed if exisitna UV m	eets T22 stand	dards)	
Concrete Pad for Chemical Storage	0.89 cu yd	\$530	\$473	
Chlorine Residual Analyzer	1 ea	\$3,000	\$3,000	
ORP Analyzer	1 ea	\$5,000	\$5,000	
Chlorine Chemical Pump	1 ea	\$800	\$800	
Dechlorination Chemical Pump	1 ea	\$800	\$800	
Tubing,etc.	1 lot	\$500	\$500	
Chart Recorder; 2 pen	1 ea	\$726	\$726	
Chemical Drum Secondary Containment	1 ea	\$941	. \$941	
Pump Enclosure	1 ea	\$750	\$750	
Conduit & Wire	1 lot	\$700	\$700	. •

		Supports and Mounting Sales Tax Contractors Mark-Up on Equipment and Materials Installation					1 lot 7.50% 15.00% 20.00%			\$500 \$1,028.75 \$2,058 \$2,743				
	6.0	Miscellaneous DHS Review Title 22 Report Engineering Desig	gn	Installed	·		1 ea 1 ea 1 ea		2,000 5,000 10,000	\$2,000 \$5,000 \$10,000	\$20,020 \$17,000			
·		Total Budget:									\$94,005			
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